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# USDA Vegetative Barriers 1/ Acquisitions and Metadata Branch

Conservation Practice Job Sheet

(Interim)

**Natural Resources Conservation Service (NRCS)** 

April 1997

Landowner



## **Definition**

Vegetative barriers are narrow, permanent strips of stiff stemmed, erect, tall, dense perennial vegetation established in parallel rows and perpendicular to the dominant slope of the field.

## **Purpose**

Vegetative barriers provide erosion control on cropland and offer an alternative to terraces where the soil might be degraded by terracing.

In addition, the following benefits are provided:

- · Facilitate benching of sloping topography.
- Retard and reduce surface runoff by promoting detention and infiltration.
- Disperse concentrated flow and reduce ephemeral gully development.
- Divert runoff to a stable outlet.
- Entrap sediment-borne and soluble contaminants and facilitate their transformations.
- Provide wildlife habitat.

<sup>1/</sup> Applicable where the states have developed an interim practice standard.

#### Where used

- On cropland fields where water or wind erosion is a problem or where water needs to be conserved.
- Where a suitable outlet can be provided.
- Where adapted perennial vegetation can be expected to become established before the field is damaged from erosion.
- On slopes less than 10 percent.

### **Conservation management system**

Vegetative barriers are normally established as part of a conservation management system to address the soil, water, air, plant, and animal needs and the owner's objectives. For this practice to be fully effective, it is important to plan the conservation crop rotation, nutrient and pest management, crop residue management, and other cropland practices.

#### Wildlife

Vegetative barriers provide excellent opportunities to improve wildlife habitat for some species by creating travel lanes that connect important habitat areas or infield escape cover. For wildlife objectives, select native species or other adapted species that provide wildlife food and cover. Practices, such as wildlife upland habitat management, provide guidance for applying vegetative barriers that meet wildlife objectives.

## **Specifications**

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. The following general specifications apply to this practice:

- Minimum width of barrier strip is 12 inches.
- Maximum vertical and horizontal spacing of barriers is determined using the terrace spacing equations.
- Barriers are aligned as near contour as practicable with minor adjustments to accommodate farming operations.

## **Operation and maintenance**

Vegetative barriers must be inspected periodically to assure no voids develop in the protective strips of vegetation. Shape and replant washouts and rills as necessary to maintain plant density. Control spreading of barrier plants into cropped areas. Control weeds and fertilize to maintain plant vigor. Control grazing and equipment traffic as necessary to protect barriers.

#### **Vegetative Barriers – Specifications Sheet** Landowner Field number Purpose (check all that apply) Reduce sheet and rill erosion ☐ Reduce runoff ☐ Reduce pollution from runoff ☐ Provide wildlife habitat ☐ Reduce ephemeral gullies ☐ Other (specify) **Location and Layout** Strip 1 Strip 2 Strip 3 Strip 4 Barrier width (in) Rows per barrier Barrier length (ft) Barrier area (acres) Field slope (%) **Plant Materials Information** Seeding Seeding Recommend lime Recommend fertilizer Species/cultivar by row number rate date (tons/acre) $N-P_2O_5-K_2O$ (lb/acre) (lb/acre) Strip #1 2 3 Strip #2 2 3 Strip #3 2 3 Strip #4 2 3 **Site Preparation** Prepare firm seedbed. Apply lime and fertilizer according to recommendations. Planting Method(s) 1. Drill seed \_\_\_\_\_ \_\_ inches deep uniformly down the row. Establish stand of vegetation according to recommended seeding rate. If necessary, mulch newly seeded area with \_\_\_\_\_ tons per acre of mulch material.

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May seed small grain as a companion crop at the rate of \_\_\_\_\_ pounds per acre, but clip or harvest before it heads out.

2. If seedlings are used, adjust column labels accordingly in above table.

## **Vegetative Barriers – Job Sketch**

Field sketch showing field boundaries, barrier widths, runoff direction arrow, and field layout. Other relevant information, such as adjacent field conditions including structures, crop types, and complementary practices, may also be included.

Scale 1"=	ft. (NA ind	_ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")									
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Additional Specifications and Notes:							

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